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THE DIRECTV GROUP INC  
PATENT DOCKET ADMINISTRATION RE/R11/A109  
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EXAMINER

VU, NGOC K

ART UNIT PAPER NUMBER

2611

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/535,105

Applicant(s)

ARSENAULT ET AL.

Examiner

Ngoc K. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification must support the limitations recited in the claims. Particularly, the specification must describe the limitation "setting the predetermined threshold by mapping the third and fourth fuzzy variable values onto the profile surface" as recited in claims 2 and 8.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5, 6, 9, 10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Knee et al. (U.S. 20020095676 A1).

Regarding claim 1, Knee discloses a method for selecting a first digital object display in an electronic television program guide (a method for selecting a first advertisement display in a television program guide – see abstract and page 5, claim 5):

receiving the first digital object from a direct-to-home satellite communication system (receiving the first advertisement from satellite link 40 – see page 2, [0018]);

determining first and second fuzzy variable values associated with the first digital object (determining first and second preselected values associated with the first advertisement – page 2, [0020] and page 3, [0028]);

determining a first priority by mapping the first and second fuzzy variable values onto a profile surface adapted for determining preferences associated with a television viewer (determining a first priority by mapping the first and second preselected values onto a demographic categories profile for determining preferences associated with a viewer, for instant, mapping or matching the first and second preselected values, e.g., 0.7 and 1, of advertisement 2 onto a demographic categories profile, e.g., “Sport Fan” and “Male Age 18-40”, respectively - see figure 2 and page 3, [0028] and [0033]);

comparing the first priority to a predefined threshold (comparing the preselected values to the predefined demographic categories values – see page 3, [0028] and [0033]); and

selecting the first digital object for display in the electronic television program guide if the first priority crosses the predefined threshold (selecting the first advertisement for display in the television program guide if the preselected values are met by the predefined demographic categories values – see page 4, [0046] and page 3, [0033]).

Regarding claim 2, Knee discloses receiving a second digital object from the direct-to-home satellite communication system (receiving a second advertisement from satellite link 40 – see page 2, [0018]);

determining third and fourth fuzzy variable values associated with the second digital object (determining third and fourth preselected values associated with the second advertisement – page 2, 0020); and

setting the predefined threshold by mapping the third and fourth fuzzy variable values onto the profile surface (providing the predefined demographic categories values by mapping or matching the third and fourth preselected values, e.g., 0.5 and 1, onto the demographic categories profile - see figure 2 and page 3, [0028] and [0032]).

Regarding claims **3 and 6**, Knee discloses displaying the first advertisement in the television program guide (see page 3, [0033] and page 4, [0046]).

Regarding claim **9**, Knee discloses an apparatus for displaying a first digital object in an electronic television program guide (an apparatus for displaying a first advertisement in an television program guide - see abstract and page 5, claim 1) comprising:

a receiver (within set top box 48) that receives the first digital object from a direct--to-home satellite communication system (receiving the first advertisement from satellite link 40-- see page 2, [0018] and figure 1);

a controller (60) for determining first and second fuzzy variable values associated with the first digital object (determining first and second preselected values associated with the first advertisement – page 2, 0020; page 3, [0028]), the controller determining a first priority by mapping the first and second fuzzy variable values onto a profile surface adapted for determining preferences associated with a television viewer (determining a first priority by mapping the first and second preselected values onto a demographic categories profile for determining preferences associated with a viewer, for instant, mapping or matching the first and second preselected values, e.g., 0.7 and 1, of advertisement 2 onto a demographic categories profile, e.g., “Sport Fan” and “Male Age 18-40”, respectively - see figure 2 and page 3, [0028])

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and [0033]), the controller comparing the first priority to a predefined threshold (comparing the preselected values to the predefined demographic categories values – see page 3, [0028] and [0033]), and

a display (52), the controller (60) causing the display (52) to present the first digital object in the electronic television program guide if the first priority crosses the predefined threshold (presenting the first advertisement in the television program guide on television 52 if the preselected values are met by the predefined demographic categories values – see page 4, [0046] and page 3, [0033]).

Regarding **claim 10**, Knee discloses receiving a second digital object from the direct-to-home satellite communication system (receiving a second advertisement from satellite link 40 – see page 2, [0018]);

determining third and fourth fuzzy variable values associated with the second digital object (determining third and fourth preselected values associated with the second advertisement – page 2, 0020); and

determining the predefined threshold by mapping the third and fourth fuzzy variable values onto the profile surface (providing the predefined demographic categories values by mapping or matching the third and fourth preselected values, e.g., 0.5 and 1, onto the demographic categories profile - see figure 2 and page 3, [0028] and [0032]).

Regarding **claim 5 and 12**, Knee discloses selecting the advertisement(s) to be displayed from among many advertisements transmitted to the user's set-top box by selecting the best fit or closest approach. In this approach, the "closeness" of the preselected values for an advertisement is determined from the predefined demographic categories values for the user. The closeness may be determined by calculating the absolute difference between the preselected value and the value for each demographic category, and then adding all of the

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absolute differences. That is selecting a number or value based on the comparison between the first priority and the predefined demographic categories values and associating the display of the first advertisement with the selected number or value (see page 4, [0047]).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knee et al. (U.S. 20020095676 A1) in view of Lemmons (US 6,481,011 B1).

Regarding claims **4 and 11**, Knee discloses comparison between the first priority and the predefined threshold and displaying the first digital object (comparing the preselected values to the predefined demographic categories values and displaying the first advertisement – see page 3, [0028] and [0033]). Knee does not explicitly disclose associating the display of the first digital object with a selected color based on the comparison. However, Lemmons discloses associating the display of program information with a selected color based on the comparison between the display priority criteria. The program information may include the title of the program, a scheduled broadcast time, advertising information ... etc. - see col. 9, lines 2-33; col. 3, lines 46-53). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Knee by associating the display of program information with a selected color based on the comparison between the display priority criteria as disclosed by Lemmons in order to highlight programming of the type the user likes.

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Claims 7, 8, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knee et al. (U.S. 20020095676 A1) in view of Lazarus et al. (US 5,652,613 A).

Regarding claim 7, Knee discloses a method for selecting a first digital object display in an electronic television program guide (a method for selecting a first advertisement display in a television program guide – see abstract and page 5, claim 5):

receiving the first digital object from a direct-to-home satellite communication system (receiving the first advertisement from satellite link 40 – see page 2, [0018]);

determining first and second fuzzy variable values associated with the first digital object (determining first and second preselected values associated with the first advertisement – page 2, [0020] and page 3, [0028]);

determining a first priority by mapping the first and second fuzzy variable values onto a profile surface adapted for determining preferences associated with a television viewer (determining a first priority by mapping the first and second preselected values onto a demographic categories profile for determining preferences associated with a viewer, for instant, mapping or matching the first and second preselected values, e.g., 0.7 and 1, of advertisement 2 onto a demographic categories profile, e.g., “Sport Fan” and “Male Age 18-40”, respectively - see figure 2 and page 3, [0028] and [0033]);

comparing the first priority to a predefined threshold (comparing the preselected values to the predefined demographic categories values – see page 3, [0028] and [0033]); and

Knee does disclose selecting the first advertisement for display in the television program guide if the preselected values are met by the predefined demographic categories values. In another words, the first advertisement would not be displayed on the user's television if preselected values are not met by the predefined demographic categories values. Knee further



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disclose a memory 64 for storing demographic categories values (see page 4, [0046] and page 3, [0028] and [0033]).

Knee does not explicitly disclose selecting the first digital object for deletion from the memory. However, Lazarus discloses a television electronic program guide memory management system deletes the least valuable stored program information at that moment as free memory space is needed by the system (see col. 4, lines 10-29; col. 4-5, lines 60-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Knee by deleting the least valuable stored program information from a memory as taught by Lazarus in order to free memory space for more storage.

Regarding claim 8, Knee discloses receiving a second digital object from the direct-to-home satellite communication system (receiving a second advertisement from satellite link 40 – see page 2, [0018]);

determining third and fourth fuzzy variable values associated with the second digital object (determining third and fourth preselected values associated with the second advertisement – page 2, 0020); and

setting the predefined threshold by mapping the third and fourth fuzzy variable values onto the profile surface (providing the predefined demographic categories values by mapping or matching the third and fourth preselected values, e.g., 0.5 and 1, onto the demographic categories profile - see figure 2 and page 3, [0028] and [0032]).

Regarding claim 13, Knee discloses an apparatus for displaying a first digital object in an electronic television program guide (an apparatus for displaying a first advertisement in an television program guide - see abstract and page 5, claim 1) comprising:

a receiver (within set top box 48) that receives the first digital object from a direct--to-home satellite communication system (receiving the first advertisement from satellite link 40 – see page 2, [0018] and figure 1);

a controller (60) for determining first and second fuzzy variable values associated with the first digital object (determining first and second preselected values associated with the first advertisement – page 2, 0020; page 3, [0028]), the controller determining a first priority by mapping the first and second fuzzy variable values onto a profile surface adapted for determining preferences associated with a television viewer (determining a first priority by mapping the first and second preselected values onto a demographic categories profile for determining preferences associated with a viewer, for instant, mapping or matching the first and second preselected values, e.g., 0.7 and 1, of advertisement 2 onto a demographic categories profile, e.g., “Sport Fan” and “Male Age 18-40”, respectively - see figure 2 and page 3, [0028] and [0033]), the controller comparing the first priority to a predefined threshold (comparing the preselected values to the predefined demographic categories values – see page 3, [0028] and [0033]), and a memory (64) (see figure 1).

Knee does disclose selecting the first advertisement for display in the television program guide if the preselected values are met by the predefined demographic categories values. In another words, the first advertisement would not be displayed on the user's television if preselected values are not met by the predefined demographic categories values. Knee further disclose a memory 64 for storing demographic categories values (see page 4, [0046] and page 3, [0028] and [0033]).

Knee does not explicitly disclose selecting the first digital object for deletion from the memory. However, Lazarus discloses a television electronic program guide memory management system deletes the least valuable stored program information at that moment as

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free memory space is needed by the system (see col. 4, lines 10-29; col. 4-5, lines 60-21).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Knee by deleting the least valuable stored program information from a memory as taught by Lazarus in order to free memory space for more storage.

Regarding claim 14, Knee discloses receiving a second digital object from the direct-to-home satellite communication system (receiving a second advertisement from satellite link 40 – see page 2, [0018]);

determining third and fourth fuzzy variable values associated with the second digital object (determining third and fourth preselected values associated with the second advertisement – page 2, 0020); and

determining the predefined threshold by mapping the third and fourth fuzzy variable values onto the profile surface (providing the predefined demographic categories values by mapping or matching the third and fourth preselected values, e.g., 0.5 and 1, onto the demographic categories profile - see figure 2 and page 3, [0028] and [0032]).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 703-306-5976. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ngoc K. Vu  
Examiner  
Art Unit 2611

September 19, 2004